

Please amend the claims as follows. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-24 (cancelled)

Claim 25 (currently amended): A polishing pad conditioner for use in a chemical mechanical polishing (CMP) apparatus, comprising:

a fixed abrasive polishing pad having an abrasive polishing surface;

a web dressing media having a contact surface defined between a first point and a second point, the first point being separate from the second point, wherein the web dressing media is configured to be positioned over the fixed abrasive polishing pad such that the contact surface of the web dressing media is configured to be applied to the abrasive polishing surface of the fixed abrasive polishing pad;

a pressure application plate configured to be applied against an application surface of the web dressing media that is an opposite surface to the contact surface and is defined between a first position and a second position of the application surface of the web dressing media;

a feed-roll positioned above the fixed abrasive polishing pad ~~media~~, the feed-roll being configured to have a supply of the web dressing media, the feed-roll is positioned at about the first point; and


a take-up roll positioned above the fixed abrasive polishing pad ~~media~~, the take-up roll being configured to collect at least a linear portion of the web dressing media, the take-up roll is positioned at about the second point,

wherein the dressing media, the feed-roll, and the take-up roll define a web handling system, the web handling system being enclosed in a housing configured to rotate.

Claim 26 (currently amended): A polishing pad conditioner for use in a chemical mechanical polishing (CMP) apparatus, comprising:

a fixed abrasive polishing pad having an abrasive polishing surface;

a web dressing media having a contact surface defined between a first point and a second point, the first point being separate from the second point, wherein the web dressing media is configured to be positioned over the fixed abrasive polishing pad such that the contact surface of the web dressing media is configured to be applied to the abrasive polishing surface of the fixed abrasive polishing pad; and

 a pressure application plate configured to be applied against an application surface of the web dressing media that is an opposite surface to the contact surface and is defined between a first position and a second position,

wherein the web dressing media and the pressure application plate are enclosed in a housing configured to rotate.

Claims 27-41 (cancelled)

Claim 42 (new): A polishing pad conditioner as recited in claim 25, further comprising:

a stabilization member for controllably applying the pressure application plate to the web dressing media so as to apply the web dressing media to the surface of the polishing pad.

Claim 43 (new): A polishing pad conditioner as recited in claim 26, further comprising:

a feed-roll positioned above the fixed abrasive polishing pad, the feed-roll being configured to have a supply of the web dressing media, the feed-roll being positioned at about the first point; and

a take-up roll positioned above the fixed abrasive polishing pad, the take-up roll being configured to collect at least a linear portion of the web dressing media, the take-up roll being positioned at about the second point.

Claim 44 (new): A pad conditioner for conditioning a pad surface, comprising:

a dressing media defined between a first point and a second point, the first point being separate from the second point, the dressing media having an application surface and a contact surface, the application surface being an opposite surface to the contact surface; and

a pressure application plate having a flat width configured to be applied against a portion of the application surface of the dressing media causing a portion of the contact surface defined opposite to the portion of the application surface to be applied onto the pad surface, such that the flat width of the pressure application plate defines the portion of the application surface to be applied to the pad.

Claim 45 (new): A pad conditioner as recited in claim 44, further comprising:

a feed-roll configured to have a supply of the dressing media, the feed-roll being positioned at about the first point; and

a take-up roll configured to collect at least a linear portion of the dressing media, the take-up roll being positioned at about the second point.



Claim 46 (new): A pad conditioner as recited in claim 44, further comprising:

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a stabilization member for controllably applying the pressure application plate onto the dressing media so as to apply the portion of the dressing media onto the pad surface.

Claim 47 (new): A pad conditioner as recited in claim 46, wherein the stabilization member includes an application arm.

Claim 48 (new): A system for polishing a wafer, comprising:

a polishing table pad having a top surface and a bottom surface, the top surface defining a wafer application region; and

a web dressing media having a first point and a second point, the first point being separate from the second point; and

a flat surface application plate configured to apply a portion of the web dressing media onto the top surface of the polishing table pad.

Claim 49 (new): A system for polishing a wafer as recited in claim 48, further comprising:

a feed-roll configured to have a supply of the dressing media, the feed-roll being positioned at about the first point; and

a take-up roll configured to collect at least a linear portion of the dressing media, the take-up roll being positioned at about the second point.

Claim 50 (new): A system for polishing a wafer as recited in claim 48, wherein the flat surface application plate can be one of a plate and a disk.


Claim 51 (new): A method for conditioning a pad in a chemical mechanical polishing (CMP) system, comprising:

moving the pad to be conditioned continuously in one direction while performing a chemical mechanical polishing operation;

feeding a web dressing media, the web dressing media having a contact surface;

collecting at least a linear portion of the web dressing media; and

applying a portion of the contact surface of the web dressing media onto a non-flexing region of the pad.

 Claim 52 (new): A method as recited in claim 51, wherein the operation of applying the portion of the contact surface of the web dressing media onto the pad surface includes:

lowering the portion of the contact surface of the web dressing media to a pad surface by controllably applying pressure onto the web dressing media; and

bringing into contact the portion of the contact surface of the web dressing media with the pad surface.

Claim 53 (new): A method as recited in claim 51, wherein the pad is a fixed abrasive polishing pad and the pad surface is an abrasive pad surface.

Claim 54 (new): A method as recited in claim 53, wherein dressing of the abrasive pad surface includes:

removing polymer matrix material from pillars of the abrasive pad surface of the fixed abrasive pad, the removing being configured to expose a fresh surface of fixed abrasive materials.

Claim 55 (new): A method as recited in claim 51, wherein the operation of feeding the web dressing media includes:

indexing the web dressing media at a programmable rate.

Claim 56 (new): A method for conditioning a polishing pad in a chemical mechanical polishing (CMP) system, comprising:

moving the polishing pad to be conditioned continuously in one direction while performing a chemical mechanical polishing operation, the polishing pad having a polishing surface that includes a conditioning region and a wafer application region, the conditioning region being defined prior to the wafer application region;

feeding a web dressing media, the web dressing media having a contact surface;

collecting at least a linear portion of the web dressing media; and

applying a portion of the contact surface of the web dressing media onto the conditioning region of the polishing surface, the conditioning region being a non-flexing region of the pad.

Claim 57 (new): A method as recited in claim 56, wherein the operation of feeding the web dressing media includes:

indexing the web dressing media at a programmable rate.

Claim 58 (new): A polishing pad conditioner for use in a chemical mechanical polishing (CMP) apparatus, comprising:

a web dressing media defined between a first point and a second point, the first point being separate from the second point, the web dressing media having an application surface and a contact surface, the application surface being an opposite surface to the contact surface;

a pressure application member configured to be applied against the application surface of the web dressing media causing the contact surface of the web dressing media defined opposite to the portion of the application surface to be applied onto a pad surface;

a feed-roll configured to have a supply of the web dressing media, the feed-roll being positioned at about the first point; and

a take-up roll configured to collect at least a linear portion of the web dressing media, the take-up roll being positioned at about the second point,

wherein the web dressing media, the feed-roll, and the take-up roll define a web handling system, the web handling system configured to rotate.

Claim 59 (new): A polishing pad conditioner as recited in claim 58, wherein the pressure application member can be one of a plate, a disk, and a roller.

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Concluded